**North Carolina Agricultural & Technical State University**

**STEPs4GROWTH** **NC CE Sector Alliance**- **S**uccessful **T**raining and **E**ffective **P**artnerships for **G**rowing **R**egional **O**pportunities in the **W**orkforce **T**o **H**arness the **NC CE Sector Alliance**

**Budget Justification (edits are shown in BLUE)**

**Changes were made to reduce the overall budget from $25.187,365 (prior) to $23,687,365 (present): The core PI and co-PI team was maintained at the prior budget level, with a slight increase in funding for Dr. Tesiero, and a reduction for Dr. Desai. The budget for post-docs was increased to attract higher quality post-docs that will be asked to perform more tasks to support the project. Equipment costs were kept constant from prior to present budget, as this is central to the success of the project. A significant decrease in Contract Services Project Management was incorporated in the present budget, as the PI and co-PI team will take an increasing role in project management along with the post-docs and the grants manager with their administrative assistant. Additional savings were realized in the 12.5% reduction in expense related to the Backbones organizations. These groups will find ways to achieve their goals and objectives with a slightly smaller budget. Jobs for the Future also agreed to reduce their budgets along with the Backbone orgs. Since the budget was submitted in February2022, STEPs4GROWTH was successful attracting money to offset the expense related to upgrading the “Navigator” employee-employer matching tool. A reduction of 50% for Navigator was realized. One final major change occurred when we reduced the Counties from 17 to 16 across the state of NC. This saves about 6% in the budget.**

**It is important to point out that the milestones and deliverables for the project will not change, although a minor adjustment in the effort devoted to each milestone or deliverable or report may be reduced slightly. The impact of a minor effort adjustment will be compensated with increased efficiency (more focused project management, task tracking, management of risks and issues, etc.). STEPs4GROWTH will increase its efforts to implement quality Project Management, and will place additional effort into the ISO 9001 Project Management Reviews to drive the project to success.**

**Preamble:**

The budget justification paragraphs below for each NC Clean Energy Alliance member mirror the Letters of Commitment received from partners/stakeholders in **STEPs4GROWTH**.

The vocabulary and abbreviations used in the Budget Justification are fully defined in the “Vocabulary for STEPs4GROWTH.pdf” file in “Optional Supporting Documentation” attachments.

The breakdown and justification for each of the proposed components are provided. The F&A rate for the university indirect cost is 44% on salaries and wages, fringe benefits, travel, materials & supplies, publication costs, and the first $25,000 on each subaward. The NCAT year starts with the beginning of the academic year and concludes with three summer months. A total of **$23,687,365** has been requested in this proposal.

Headings Below in **BLUE** are aligned with the SF424A-V1.0 Budget Info.pdf file:

1. **Personnel**

**SENIOR/KEY PERSONNEL:**

Dr. Gokaraju, PI, Associate Professor in the College of Engineering at NCAT: will serve as the PI and leader of **STEPs4GROWTH**. He will devote 2 summer months (17% CY effort) and 20% AY effort in each year. Dr. Gokaraju will be responsible for overall administration and direction of the project. **Total funds requested: $191,966.**

Dr. Monty, co-PI, Director of the Center for Energy Research and Technology, College of Engineering, NCAT: will devote 4 months (33% CY effort) each year. Dr. Monty will be a key contributor to all vertical and horizontal teams and will directly support the PI with all needed tasks that require attention. Dr. Monty has collaborated closely with the PI on the Proposal and both are part of CERT. Additionally, Dr. Monty has a leadership role in the horizontal DEIA, Expansion, and Advisory Board Thrusts. Dr. Monty will help the Thrust teams support all 4 vertical CE sectors and sub-sectors. DEIA implementation will collaborate with JFF and with LiNC-IT autism workforce development organizations to achieve the DEIA goals. **Total funds requested: $192,368.**

Dr. Tesiero, co-PI, Assistant Professor in the College of Engineering at NCAT: will serve as the horizontal leader of the Hands-on Training Thrust. He will lead efforts to put in place the hands-on training equipment in place in Regional Training Centers across NC regions, to establish the primary Training Center at NCAT, and will oversee the development of the Mobile Training Centers in tractor-trailer trucks. Dr. Tesiero will devote 2 summer months (17% AY effort) and 10% AY effort in each year to the project. **Total funds requested: $117,483.**

Dr. Desai, co-PI, Professor in the College of Engineering at NCAT, and Director of CEPDAM (the Center of Excellence for Product Development and Advanced Manufacturing): will serve as the horizontal leader of the Innovative Technology Thrust. He will gather requirements from all CE Sectors related to new technology and research efforts, and develop plans that can address those needs, and work to put in place new curriculum and hands-on training in innovative technology being developed in the CE sector. Dr. Desai will devote 0.36 CY months (3% CY effort) to the project. **Total funds requested: $15,199.**

TBD Faculty Member, key personnel, will be assigned to the project under the direction of Dr. Desai. The faculty member will devote 2 summer months per year (17% AY effort) to the project. The faculty member will support activity in the Innovative Technology Thrust. Additionally, this faculty member will devote time to writing proposals to sustain STEPs4GROWTH and to augment areas where additional funds are needed to be even more successful. **Total funds requested: $83,673.**

**Total funds requested for Senior/Key Personnel: $600,689**

**OTHER PERSONNEL:**

Post-Doctoral Students: 2 students will be used in **STEPs4GROWTH** on a full-time basis (100% effort). The one-year salary for a post-doc will be $66,000/yr. The first year will have only 9 months of 2 Post-Doctoral student expense as it will take 3 months to hire the students. These students will help the PI organize and execute the project. The Post-Doctoral students will play an increasing role in Project Management to augment the reduction in hiring in the Project Manager position. With 5 Backbone organizations, and 10 horizontal cross-sector Thrust teams, the Post-Docs will give support to these efforts and will organize/conduct meetings, gather data, write reports, and publish content to stakeholders and to journals based on results of **STEPs4GROWTH. Total funds requested: $519,239.**

Project Manager: NCAT will hire a Project Manager to oversee Project Tasks, working directly for Dr. Gokaraju, PI. This will be a key person to coordinate with all the vertical CE Sector activities and horizontal cross-sector support Thrusts. The Project Manager will also coordinate with PPC (Precise Process Consulting), the overall Program Manager (PM) for STEPs4Growth. The Project Manager will have an administrative assistant support reporting directly to them. **Total funds requested: $275,354.**

Administrative Support: This person will support the Project Manager directly and handle many financial, planning, and execution tasks for the project. Setting up meetings, handling travel, taking care of invoicing and all banner finance activity will be part of the Administrative Support function. The Administrative Support expense was increased slightly to attract higher quality and to offset the reduction in Project Management contract services. **Total funds requested: $157,345.**

Graduate Students (5): There will be 5 graduate students (paid $22/hr, for 20 hrs/week, for 4 weeks/month, for 9 months per year in Y1 (need time to hire), and for 12 months per year in Y2-Y4) active in **STEPs4GROWTH**. Each PI/co-PI will have a graduate student supporting them (Gokaraju, Monty, Tesiero, Desai, and last undefined Faculty member). The graduate students will gather research data and metrics on the project, perform analysis, write reports, and help to draft journal articles for publication. **Total funds requested: $396,000.**

Undergraduate Students (4): There will be 4 undergraduate students (paid $12/hr, for 20 hrs/week, for 4 weeks/month, for 3 summer months per year, plus $12/hr, for 10 hrs/week, for 4 weeks/month, for 9 academic months per year) active in **STEPs4GROWTH**. The PI and 3 co-PIs will have an undergraduate student supporting them (Gokaraju, Monty, Tesiero, and Desai). The graduate students will gather research data and metrics on the project, perform analysis, write reports, and help to draft journal articles for publication. **Total funds requested: $115,200.**

**Total funds requested for Other Personnel: $1,463,138.**

**Total funds requested for Personnel: $2,063,827.**

1. **Fringe Benefits**

Fringe benefits for all Senior Personnel and Other Key Personnel are budgeted at the university’s rate of 36%. Graduate and undergraduate students are budgeted at the rate of 7.65% for the three summer months. **Total funds requested: $569,411.**

**Total funds requested for Fringe Benefits: $569,411.**

1. **Travel**

Domestic Travel: Funds are budgeted for the PI, Co-PIs, and the rest of the **STEPs4GROWTH** team to attend an annual meeting of all stakeholders. It is expected that about 50 people will gather from the 70+ total members of **STEPs4GROWTH**. $500/2-day meeting has been allocated for 50 attendees or $25,000. The remaining travel budget will pay for the many groups in **STEPs4GROWTH** to conduct standard business across the state of NC. Those groups will include, in part: PIs, CC staff, other personnel, mobile unit travel expense, CE Regional Coordinators, an Apprenticeship Administrator from the CC System, Trainers for Train-the-trainer workshops, all Backbone organizations, all leaders from cross-sector Thrusts, Project Management subcontractor, Growth Sector, JFF, and NCBCE.. Approximate travel costs will cover conference registration, airfare, ground transportation, lodging and per diem. The Travel line supports attendance at 3-6 EDA GJC Convenings, as requested by the Program Officer in June2022. **Total funds requested: $274,528.**

**Total funds requested for Travel: $274,528.**

1. **Equipment**

Major Equipment: NCAT will purchase equipment for the **STEPs4GROWTH** Regional Training Center (to be located on the NCAT campus). This location will service all student participants from surrounding Greensboro counties. **STEPs4GROWTH** will spend $200k in Y1 (specific to the Energy Efficiency Sector only, that will be the focus for the first 7-12 months of the projecxt), and $700k in Y2 (to put equipment in place to train in all 4 CE sectors (adding equipment for Renewable Energy, Clean Vehicles, and Grid & Storage). **Total funds requested: $900,000.**

**Total funds requested for Equipment: $900,000.**

1. **Supplies**

Materials and Supplies: Funds are budgeted in Y2-Y4 only, for teaching materials for curriculum, meeting materials, safety gear, protective clothing, and hands-on kit materials to be used in the delivery of course content. Due to the fundamental research nature of the project, materials costs are estimated based on the PI’s knowledge of prior projects of similar scope. **Total funds requested: $75,000**

**Total funds requested for Supplies: $75,000.**

1. **Contractual**

Contract Services-Online Module Development: Funds are requested to develop curriculum for online course delivery and self-paced online instruction. CE Modules will be adopted and adapted/tailored from existing course materials to be useable across the state of NC in the regions. This account line is intended to augment budget given directly to CCs to develop online and self-paced course materials. $25,000 per year has been set aside to support online and self-paced curriculum development, in addition to the $50,000/yr given to CCs to interface with **STEPs4GROWTH** and to develop curriculum for CE training. **Total funds requested: $100,000.**

Contract Services-Mobile Unit Instructors: Instructors for the mobile unit will be hired to travel with the tractor-trailer hands-on training mobile units to various CC campuses, or other locations to instruct **STEPs4GROWTH** participants. A full-time instructor for Mobile units will be paid $60,000/year. **STEPs4GROWTH** will need one instructor for two mobile units in the third year when the mobile units are first put into service. There will be two tractor trailers, but each will contain equipment for just two of the Clean Energy Sector hands-on training equipment. By Y4, 2 instructors will be needed for mobile labs, and higher volumes of students. It is expected that both trailers will have the same equipment in each, and will be able to train students in all 4 CE pyramid models. **Total funds requested: $180,000.**

Contract Services-Mobile Unit Driver: Contracted Mobile Lab Drivers (n=1 in Y3, n=2 in Y4) to be hired. The drivers will be used in Y3 (one driver for two mobile units) and Y4 (two drivers for two mobile units). The mobile units will primarily be used in the 10 Tier 1 counties in eastern NC. The mobile unit tractor-trailer driver is budgeted at $75,000/yr. **Total funds requested: $225,000.**

Consultant-Program Management: A Program Management leader for **STEPs4GROWTH** will be selected by a bidding process. The selected Program Manager will work in tandem with the PI, Dr. Gokaraju. The roles and responsibilities in the project include:

1. Lead and manage both the 4-Vertical CE Sectors (five backbone organizations) and 10-Horizontal Cross-Sector Thrusts (5 Professors and 4 NFP Leads) with Processes, Design and Goals.
2. Report to the System Lead Entity—NCAT (Dr. Gokaraju and Dr. Monty)
3. Convene bi-weekly meetings of all the leads to ensure the deliverables, goals are being met and evaluate the performance metrics
4. Share the execution plan and timelines with all 15 Leaders (5 Backbone organizations and 10 cross-sector Thrust leaders) during the System development-Phase1 and program design-Phase2 (19 months).
5. Track the status of the program system development, program design, and program implementation phases in all 4 regions. Program Implementation will start in summer 2024 and end in summer 2026.

The Program Management consultant team is budgeted at $155,000/yr. **Total funds requested: $620,000.**

Consultant-External Evaluator (TBD): An external evaluator will be hired to assess the Management of the **STEPs4GROWTH** project, and evaluate the teams effectiveness. A focus will be placed on GJC Metrics of success as they relate to training, apprentices, workers, worker placement, costs per participant, and tracking of student achievements. Additionally, the external evaluator will monitor the **STEPs4GROWTH** accomplishment and completion of Goals, Objectives, Tasks, Milestones, and Deliverables. This position is budgeted for $10,000 per year. **Total funds requested: $40,000.**

Consultant-CE Regional Coordinators (n=4): 4 individuals, one for each region (Charlotte, Greensboro, Halifax and NE NC Coastal), to coordinate all regional stakeholders in project: Industry, CCs, WDBs, CoCs, HSs, RTCs, SSSs, Mobile Training Centers if in their region, Universities, and ApprenticeshipNC. Directly reports to PI. Will gather data on project performance, participant success factors, demographics, and all other participant data. Will be active in Recruiting of students and industry partners. There will be continuous communication between CE Regional Coordinators and SSSs to track participants. The CE Regional Coordinator is the central go-to person in a region, and will be attentive to all risks and issues in the project. This position is budgeted at $30,000/yr in each region. **Total funds requested: $480,000.**

Consultant-Apprenticeship Administrator: 1 FTE for Apprenticeship administration to support state ApprenticeshipNC activity (establishing new pre-Apprenticeships and Apprenticeships programs, handling documentation of registrations of students before graduating from HS, interfacing with the **STEPs4GROWTH** leadership, including Backbone orgs), Will support the Articulation agreement activity between HSs and CCs, and CCs and 4-year universities. Budgeted for $83,000/yr. but will only be needed ½ of first year ($41,500). **Total funds requested: $290,500.**

Consultant-Trainer Workshops: Train the trainer workshops to bring all teachers/instructors to same level for uniform and consistent instruction. A trainer will be contracted to do the training of multiple educators at one time. **Total funds requested: $320,000.**

Consultant- Robert Powell: Professor Powell will be retiring in June 2022 from NCA&T. He has been an active professor in CERT for 30 years. He will be hired as a consultant for **STEPs4GROWTH** at $20,000/yr for 4 years. Robert Powell will be paid by NCAT as a consultant with a 1099 Form. He has a position as Vice-Chair of Advanced Energy (one of **STEPs4GROWTH**’s Backbone organizations), and will be elevated to Chair by 2023. Additionally, Prof. Powell is an active leader of DEIA working group for e4Carolinas (another backbone org). Prof. Powell was recognized in late 2021 by NCSEA (another backbone org) for Career contribution to the Energy Sector in NC. He is connected to all the Backbone organizations, including the NCSU Clean Energy Tech Center. Robert will provide a link to all the Backbone organizations, and help the PI lead the project. **Total funds requested: $80,000.**

Subaward-NCSU, UNCC, NCSEA, e4Carolinas, and Advanced Energy Backbone Organizations:Each Backbone organization will be taking a significant role in the project. Their Roles and Responsibilities are enumerated below: (NCSU is leading the Renewable Energy Sector, UNCC and e4Carolinas are sharing the lead of the Grid & Storage Sector, NCSEA and e4Carolinas are sharing the Clean Vehicles Sector, and Advanced Energy is leading the Energy Efficiency Sector.)

1. Convene meetings in their CE Sector focus areas for, planning, Pyramid Model development, strategic design, and implementation of training. Various CE Sectoral Partnership team members will be engaged, including: horizontal cross-sector Thrust leaders, apprenticeship programs, community colleges, industries, Workforce Development Boards, Chambers of Commerce, and other Subject Matter Experts (SMEs) as needed.
2. Conduct periodic Meetings in Clean Energy sector initiatives through conferences, annual meetings, discussions, etc.
3. Recruit Industry Partners to be willing to host/support apprentices.
4. Supervise training programs and track progress of clean energy certifications. Determine training equipment needs, instructor needs, and AAS degrees requirements.
5. Ensure the summer Alpha testing is in place for Year 2023 for the assigned CE Sector.
6. Ensure full apprenticeships are established for Year 2024 for all CE sub sectors.
7. Ensure full apprenticeships are established for Year 2025 and Year 2026 for all CE sub-sector Pyramid Models.

Each Backbone will be paid $175,000/yr or $700,000 total to lead their vertical CE Sectoral Partnership teams. There are 5 Backbone organizations. **Total funds requested: $3,500,000.**

Subaward-Appalachian State University: AppStates Roles and Responsibilities are enumerated below

1. Convene meetings in their CE cross-sector Batteries & Storage to integrate the vertical CE Sector plans together in a supportive manner. Support the Pyramid Model development, strategic design, and implementation of training. Various CE Sectoral Partnership team members will be engaged in Horizontal team efforts, including: vertical CE Sector Backbone leaders, apprenticeship programs, community colleges, industries, Workforce Development Boards, Chambers of Commerce, and other Subject Matter Experts (SMEs) as needed.
2. Conduct periodic Meetings in Clean Energy sector initiatives through conferences, annual meetings, discussions, etc.
3. Work with CE Sector Backbone teams to define training that re-uses assets, curriculum, and equipment to maximize investments in CE educational training, including hands-on equipment instruction.
4. Recruit Industry Partners to be willing to host/support apprentices.
5. Supervise training programs and track progress of clean energy certifications. Determine training equipment needs, instructor needs, and AAS degrees requirements.
6. Ensure the summer Alpha testing is in place for Year 2023 for all CE Sectors in the focused area of Batteries and Storage.
7. Ensure full apprenticeships are established for Year 2024 for all CE sub sectors.
8. Ensure full apprenticeships are established for Year 2025 and Year 2026 for all CE sub-sector Pyramid Models.

The role of Dr. Russell at AppStateUniv is large as there are likely to be different fundamentals to be trained on in each Vertical CE Sector. Those CE Sectors will have significantly different needs for batteries and storage, and a convergence of training around batteries and storage is the final goal. **Total funds requested: $300,000.**

Subaward-Growth Sector: Growth Sector is a leader in the Nation with wrap-around services through their Student Support Specialist approach. It is presently being used in both large NSF and DOE grants. Growth Sector has a SSS network of over 40 people that meet regularly to discuss best practice and to work to improve the SSS system in a continuous improvement mode. Growth Sector will provide leadership to **STEPs4GROWTH’s** SSSs by helping to hire them, training them, integrating them and giving guidance to the SSSs regularly throughout the year. Growth Sector has an entire website devoted to the SSS practice including manuals, training materials, MOUs, “agreement templates” for students in programs, etc. Growth Sector will shepherd the SSSs in **STEPs4GROWTH**. Growth Sector is budgeted for $50,000/yr.

**Total funds requested: $200,000.**

Subaward-Jobs For the Future: JFF will provide Sector strategy coaching and other technical assistance broadly across **STEPs4GROWTH.** Additionally, JFF will provide outreach and recruitment strategies coordination and support for the vertical CE Sectors, and for the horizontal cross-sector Thrusts. JFF is budgeted at $175,000/yr. **Total funds requested: $700,000.**

Subaward-NCBCE (NC Business Committee for Education): NCBCE’s Career & Employment Specialist (1 FTE) will lead the cross-sector Job Placement Thrust. This Thrust will be supported by JFF, LiNC-IT/Accessibility Coordinator, Growth Sector, career-service coordinators at 17 community colleges, and regional program coordinators. The LiNC-IT/Accessibility Coordinator (1 FTE) will lead the autism-spectrum apprenticeship program in Clean Energy skills for Building Energy Management and for Cybersecurity of the Grid. NCBCE’s Career & Employment Specialist will be the one-stop liaison between industries and all apprenticeship programs. NCBCE will lead the development of the Navigator tool that links employers to workers for jobs in the workforce and in apprenticeship opportunities. Each FTE is budgeted at $83,000/yr. Additionally, $75,000 (Y2 only) has been set aside for Navigator software tool development to optimize its use with the **STEPs4GROWTH** project. The Navigator tool was rolled out in 2018 and has been used by half of all educators in NC to date. Since the STEPs4GROWTH Proposal was submitted in Feb2022, alternative funds were found to bolster the Navigator tool, thereby allowing a smaller expense in the budget. **Total funds requested: $739,000.**

Subawards-Community College Partnerships: 16 CCs are part of **STEPs4GROWTH.** (This has been reduced from 17 in prior budget justifications). Each CC is budgeted for $50k/yr for Administrative Support and Curriculum development. This amounts to a total of $800,000 each year ($3,200,000 total for 4 years) for CC interaction in **STEPs4GROWTH.** 4 SSSs will be in each of 4 regions to support and coordinate with the CCs. Each region will establish one fixed-location Regional Training Center. The equipment for those RTCs is budgeted for $200k in Y1 for 3 regions (NCAT RTC is covered separately above). Another $600k for equipment is budgeted in Y2 for 3 RTCs, and another $750k for equipment in two Mobile units. Total equipment costs will be $800k/RTC, and $750k/mobile unit. Since there are effectively 3 RTCs (fixed location) and 2 mobile training units, the total spend on equipment to train CE Sector workers will be $3,900,000.

An additional expense is allocated to 4 CCs in the region. This is because there are 4 SSSs to be assigned to each region. The SSSs assigned to each of the 4 regions will have direct communication with the student participants and will track their progress through STEPs4GROWTH. In Y1 the SSS will work only 9 months as it will take time to hire SSSs. This will include gathering data related to their education, work-experiences, and job placements. The SSSs will additionally track the students after employment for a few years to understand student pathways. The SSS is budgeted at $60,000 per region and will be a part-time role added to another employee at a CC in each region. The total SSS expense is $180,000 in Y1, and $240,000 in Y2-Y4, or $900,000 for **STEPs4GROWTH.**

Each CC in the **STEPs4GROWTH** project will support the following (note that not all CCs will have all the roles below. Some are established for the Regional Training Center CCs specifically.

1. Appoint a point person to attend bi-weekly meetings for curriculum development, and to establish certifications.
2. Appoint a point person in career services to the apprentices and students in **STEPs4GROWTH** to provide career awareness, career coaching and counseling, resume building, mock-up interviews etc.
3. 4 CCs will commit space of ~1200 square feet for establishing a CE Regional Training Center on campus (likely to be at Olympic HS (half of the equipment in Charlotte Region), CPCC (half of the equipment in Charlotte Region), NCAT, Halifax CC, and Martin CC).
4. Supervise training programs and track progress for establishing CE certifications for courses taken, training equipment needs, instructor needs, and AAS degrees.
5. Collaborate with other counties in **STEPs4GROWTH** to share curriculum/experiences
6. Conduct the summer pre-apprenticeship testing, and pilot apprenticeships in all years of the **STEPs4GROWTH** project.
7. Implement complete educational Pyramid Models in each region through support for curriculum and hands-on training. This will be done in summer of 2024, 2025, and 2026.
8. Work across all CCs in **STEPs4GROWTH** to develop sharing models that allow for tuition payments to multiple CCs for courses taken online and in a self-pace online environment.
9. Help **STEPs4GROWTH** establish articulation agreements between HSs (vocational courses and dual enrollment courses) and CCs, and between CCs and 4-year universities in the project.
10. Participate in External and Internal Advisory Board roles to help guide the **STEPs4GROWTH** project.
11. Recruit students from HS to enter the pre-apprenticeship and apprenticeship programs before they graduate from HS (to take advantage of the tuition waivers provided by the state of NC CC system).

**Total funds requested: $8,000,000.**

**Total funds requested for Contractual: $15,774,500.**

1. **Construction**

Not Applicable

1. **Other**

Other Support – Tuition for Participants: These expenses are tuition costs not covered by ApprenticeshipNC and the NC CC System. ApprenticeshipNC will waive tuition costs for any participant that is registered in a pre-apprenticeship of apprenticeship program before they leave their HS. This will be many of the participants, but not all. Therefore, this budget item will support others that wish to take courses in CC but are not part of the apprenticeship programs. The amount can also be used in university-tuition reimbursement. This tuition budget line item is not likely to be sufficient to cover all costs of tuition for all students. Industry will be counted on to support as well, and some tuition costs may be borne by participants themselves. **Total funds requested: $180,000.**

Additional Wrap-Around Services for Participants: Y1-Y4 expenses for food, travel, support for single parents, daycare, career coaching. Wrap-around service organizations will work closely with both the STEPs4GROWTH Student Support Specialists, local CC career services departments, local WDBs, and others to secure more state and federal funding for wrap-around services. The estimated per year assumes $1500/yr/student (this is about ½ the amount provided by NC state budgets per student in K-12 education) and assumes that 1/2 of students might need wrap-around services on average. Therefore about 50 students in Y1, 120 students in Y2, 150 students in Y3, and 250 students in Y4. This amounts to $75k in Y1, $180k in Y2, $225k in Y3, and $375k in Y4. **Total funds requested: $855,000.**

Publication Costs: Funds are requested at $5,000 in Y2-Y4 for outreach, recruiting, marketing, publication of scholarly work, documentation, and dissemination costs. **Total funds requested: $15,000**

Tuition: Tuition for NCAT graduate students will be paid during the 2 semesters during the academic year, except in Y1 when the students will not begin until the Spring semester of 2023. Therefore, the cost for tuition in Y1 will be only $8,500 \* 5 students, or $42,500. The average tuition expense is $8,500/semester, or $17,000/academic year. The total tuition for 5 graduate students is therefore, $85,000 for Y2-Y4. The total expense for Graduate student tuition will be $297,500. **Total funds requested: $278,863.**

Advisory Board Meetings: Both Internal Advisory Board and External Advisory Board meetings will occur twice per year. They are intended to be online. $10,000/year has been set aside to pay for all expenses related to IAB and EAB meetings. **Total funds requested: $40,000.**

**Total funds requested for Other: $1,368,863.**

1. **Total Direct Charges (sum a-h)**

**TOTAL DIRECT COSTS: $21,026,129**

Modified Total Direct Costs ($5,514,489)

1. **Indirect Charges**

**TOTAL INDIRECT COSTS: $2,661,237**

Indirect costs are calculated at 44% MTDC

1. **TOTALS (sum of i and j)**

**TOTAL PROJECT COSTS: $23,687,365**

Year 1: $5,139,707

Year 2: $8,601,139

Year 3: $4,788,243

Year 4: $5,158,277

**System Development Phase 1 (01Oct2022 – 30Apr2023): $3,068,836**

**Program Design Phase 2 (01May2023 – 30Apr2024): $7,088,202**

**Program Implementation Phase 3 (01May2024 – 30Sep2026): $13,530,327**